

ADDENDUM NO. 3  
SEWER SYSTEM IMPROVEMENTS  
CONTRACT 17-01  
SOUTH WWTP AERATION BASIN IMPROVEMENTS  
HENDERSON WATER UTILITY  
HENDERSON, KENTUCKY  
WAUFORD PROJECT NO. 2077

Date of Addendum: Wednesday, July 12, 2017

**Revised Bid Opening: Friday, July 14, 2017, 1:30 P.M. Central Time**

1. Detailed Specifications, Section 5. Piping, Fittings, Valves, Manholes and Accessories, Paragraph 3. General Piping and Valve Applications, Page DS 5-1:

Modify the text at "All Buried Piping" as follows:

"All Buried Piping:

Class 350 DIP with Push-On Joints. Restrained joints shall be provided ***where indicated on the Plans.***"

2. Plans, Sheets 3 through 7:

Modify Construction Note #4 on Sheet 3 and 5, and Note #3 on Sheet 4, 6, and 7 as follows:

"Unless indicated otherwise, all piping for buried installation shall be class 350 DIP. ***Aeration basin influent piping, effluent piping and air piping shall have*** restrained joints. Liquid piping shall be cement lined and air piping shall be unlined."

3. Plans, Sheet 6:

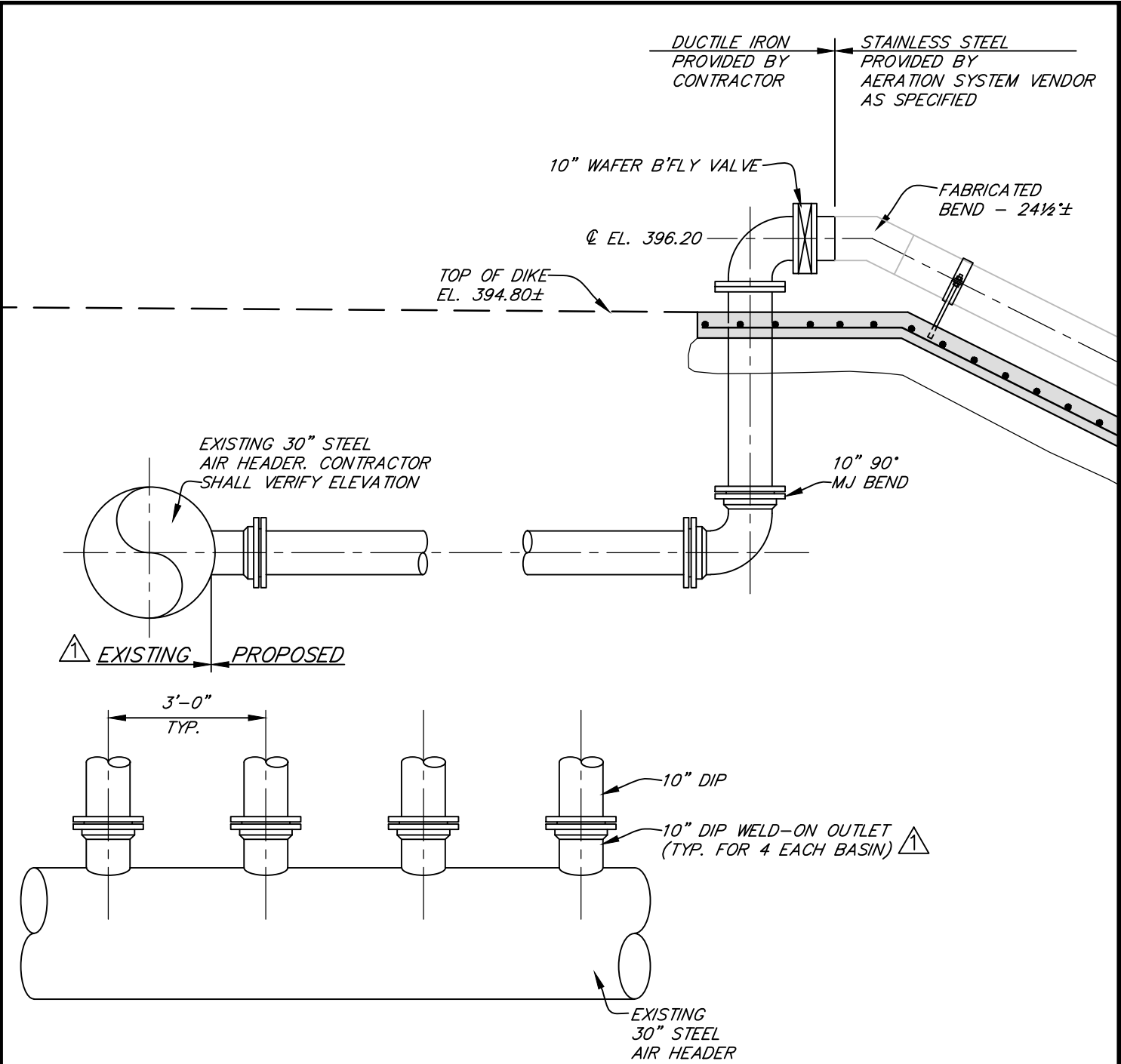
Modify as shown on the attached 8 1/2" x 11" sheet.

4. Attached is the Question and Answer document regarding questions submitted after Addendum No. 2 was issued.

J. R. WAUFORD & COMPANY,  
CONSULTING ENGINEERS, INC.



Stephen C. Lee, P.E.  
Kentucky License No. 27833



△ AIR HEADER DETAIL

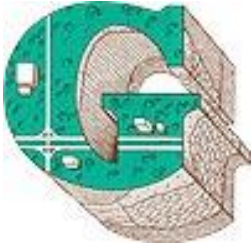
SHEET <b>6</b> OF <b>7</b>		<b>SEWER SYSTEM IMPROVEMENTS</b>	
REVISIONS		<b>CONTRACT 17-01</b>	
△ ADDENDUM NO. 3 7/12/2017 WZM		SOUTH WASTEWATER TREATMENT PLANT AERATION BASIN IMPROVEMENTS	
		<b>AIR PIPING, DEWATERING PIPE AND SUMP DETAILS</b>	
		FOR <b>HENDERSON WATER UTILITY</b> <b>HENDERSON, KENTUCKY</b>	
PROJECT NUMBER 2077		SCALE 1"=30'	<b>WAUFORD</b> J. R. Wauford & Company, Consulting Engineers, Inc. Nashville, Tennessee (615)883-3243 www.jrwauford.com
		DATE JUNE 2017	

ADDENDUM #3 QUESTIONS AND CLARIFICATIONS  
CONTRACT 17-01 – SOUTH WWTP AERATION BASIN IMPROVEMENTS  
HENDERSON, KENTUCKY

**Bid Date:     Friday, July 14, 2017**  
**Time:         1:30 PM Central Time**

Questions/Answers and Clarifications:

1. **Clarification – A potential borrow area has been identified near the South WWTP. See the attached letter from the Geotechnical Engineer and map.**
2. Is full-depth rock backfill required above the gravity line shown on Sheet 4 of the Plans?  
**This line shall be backfilled with compacted select native materials. The gravel road shall be restored to original condition.**
3. Is it acceptable for the geonet to be installed with a geotextile attached?  
**Yes.**
4. How will the liner be attached to the effluent structure?  
**See “Effluent Structure (6 Req’d)” Detail on Sheet 7 of the Plans.**
5. What type of pipe shall be used for the aeration piping droplegs?  
**See Sub-Section 6B, Paragraph 6c. Drop Legs of the Project Manual.**
6. Are the existing influent valves to the north of the basins in good working order?  
**Condition of the valves is unknown; however, adjustable weir gates at the flow diversion box can be used to shut off influent flow if valves do not operate.**
7. Will the HWU furnish water for testing the basin aeration equipment?  
**The Owner will allow the Contractor to use potable water from a hydrant to test aeration equipment.**
8. Will HWU furnish temporary power for construction?  
**Refer to Section 1, Paragraph 9. Utilities Required by Contractor(s).**
9. Is filter fabric required for the entire bottom of the basin and the sides under the rock?  
**Filter Fabric is required underneath the concrete slab and around perforated PVC drain piping. See “Lagoon Liner Detail” on Sheet 5 of the Plans.**
10. Can the existing fence on the west side of the property be removed and re-installed during construction of the proposed drain line?  
**Yes.**



**GREENBAUM ASSOCIATES, INC.**  
**GEOTECHNICAL & MATERIALS ENGINEERS**

994 Longfield Avenue  
Louisville, Kentucky 40215  
502/361-8447  
FAX 502/361-4793

July 12, 2017

Mr. Tom Williams, P.E.  
Henderson Water Utility  
111 Fifth Street  
Henderson, KY 42420

**SUBJECT: TESTING OF BORROW MATERIALS  
SOUTH WWTP AERATION BASIN IMPROVEMENTS  
GREENBAUM PROJECT 17-094C**

Dear Mr. Williams:

Attached is a graph providing the grain size distribution of three samples of soil that were delivered to our laboratory along with a drawing we were provided showing the locations from which the three samples were taken. Sample 2 has a lower silt and clay content than the other two samples. None of the samples are plastic.

Soil matching that of samples 1 and 3 will work better than that matching sample 2 since the higher silt and clay content will hold the soil on the slope better.

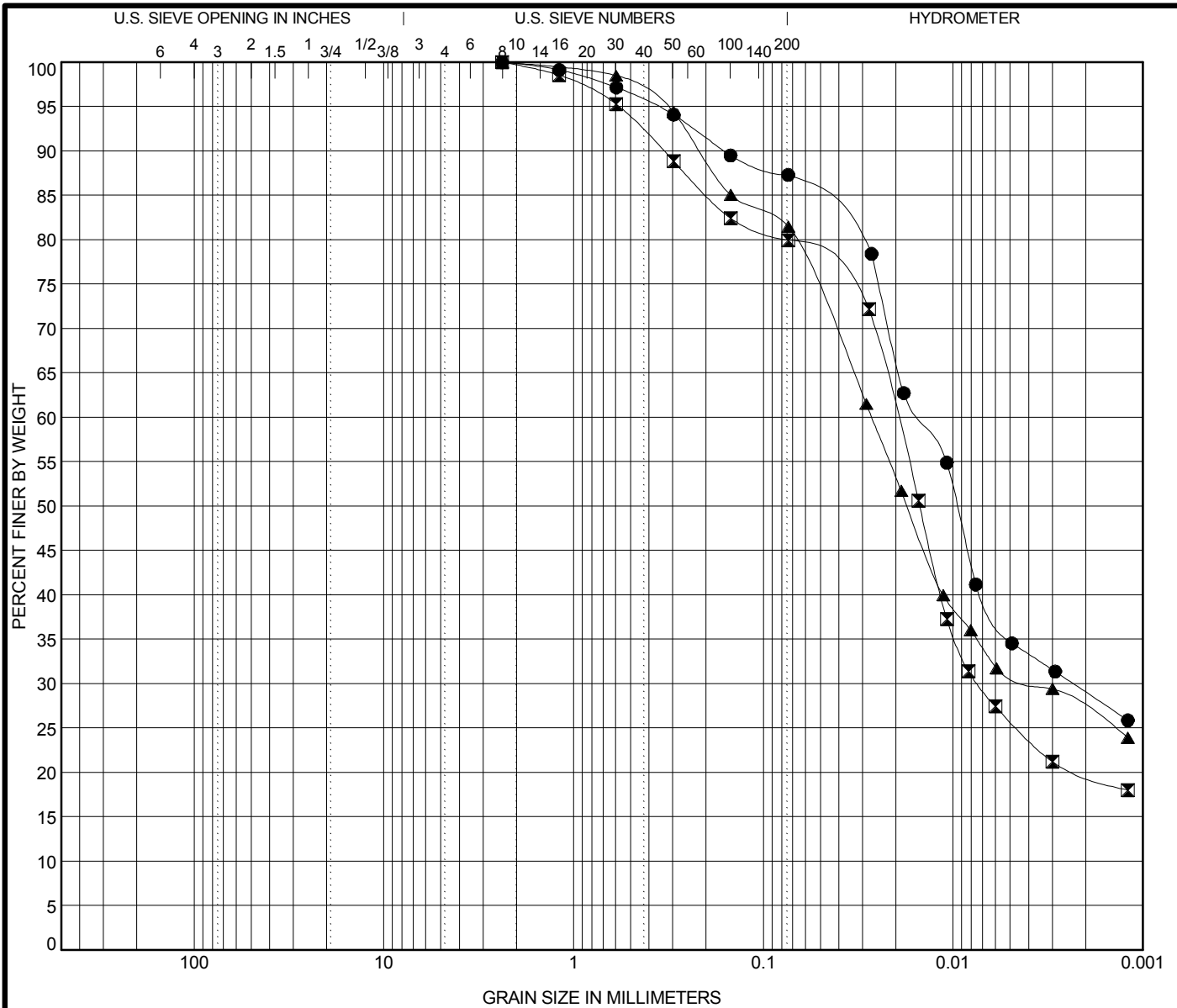
If you have any questions in regard to this borrow material, please call.

Yours truly,

**GREENBAUM ASSOCIATES, INC.**

*Sandor R. Greenbaum*


Sandor R. Greenbaum, P.E.  
President/Principal Engineer



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● Sample 1	0.0					
■ Sample 2	0.0					
▲ Sample 3	0.0					

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● Sample 1	0.0	2.38	0.015	0.002	0.0	12.7	52.5	34.8
■ Sample 2	0.0	2.38	0.02	0.007	0.0	20.0	54.2	25.8
▲ Sample 3	0.0	2.38	0.027	0.004	0.0	18.4	50.4	31.2



**Greenbaum Associates, Inc.**  
Louisville, KY 40215  
(502) 361-8447

### GRAIN SIZE DISTRIBUTION

Project: South WWTP  
Location: Henderson, KY  
Number: 17-094C

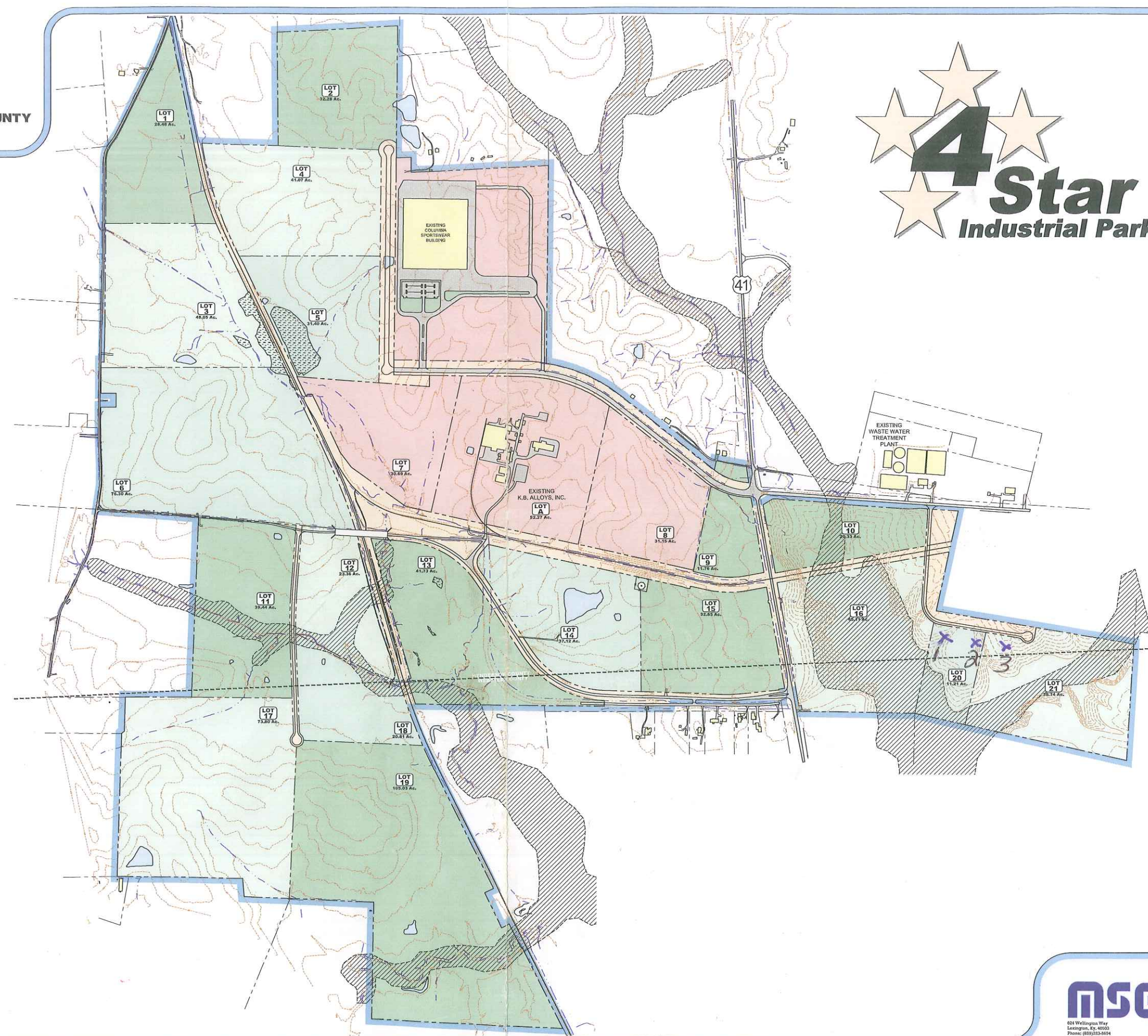
U.S. GRAIN SIZE 17-094C.GPJ GREENBAUM.GDT 7/12/17




  
**MASTER SITE PLAN**  
**FOUR STAR REGIONAL**  
**INDUSTRIAL PARK**  
**HENDERSON-WEBSTER COUNTY**  
**KENTUCKY**

**MAP LEGEND:**

	BUSINESS PARK BOUNDARY
	EXISTING PAVED AREAS
	EXISTING WETLANDS AREAS
	EXISTING BUILDINGS
	EXISTING WATER BODY
	EXISTING 100 YR. FLOOD ZONE BOUNDARY
	PROPOSED BUILDING
	PROPOSED OFFICE SPACE
	PROPOSED PAVED AREAS
	EXISTING LOT (OCCUPIED)
	PROPOSED LOTS
	ROW AREAS
	EXISTING CSX RAIL ROAD
	PROPOSED RAIL ROAD SPUR
	EXISTING GROUND CONTOUR
	EXISTING STREAM
	PROPOSED LOT: NUMBER/AREA
	PROPOSED RAIL ROAD OVERPASS



DEC 24 11:05:54 AM EST 2014 DATE: 2014/12/24 TIME: 11:05:54 AM EST USER: M:\GIS\PROJECTS\4 STAR REGIONAL INDUSTRIAL PARK\4 STAR REGIONAL INDUSTRIAL PARK\_MASTER SITE PLAN.dwg

**MSC** Mayes, Suddeth & Etheredge, Inc.  
 624 Wellington Way  
 Lexington, Ky, 40505  
 Phone: (606)253-2404  
 Fax: (606)253-2407

Drawn by: Alberto Gomez

17-094C